



ANNUAL REPORT

ON THE

. . **HEALTH** . .

OF THE

BOROUGH OF CHESTERFIELD,

FOR

1896,

BY

MEREDITH RICHARDS,

M.D. (MEDICINE & STATE MEDICINE), B.S. (LOND.),

Medical Officer of Health.

CHESTERFIELD & CLAY CROSS :

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1897.

Borough of Chesterfield.

Sanitary Committee:

The Mayor,

MR. COUNCILLOR MARKHAM, J.P.

Chairman:

MR. ALDERMAN CLAYTON, J.P.

Vice-Chairman:

MR. ALDERMAN BOOTH, J.P., M.R.C.S., L.R.C.P.

Members:

MR. ALDERMAN ROBINSON, J.P.

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MR. COUNCILLOR HADFIELD,

„ LOCKE,

„ MARRIOTT, J.P.,

„ PARSONS,

„ SPOONER,

„ WRIGLEY.

Medical Officer of Health:

MEREDITH RICHARDS,

M.D. (MEDICINE & STATE MEDICINE), B.S., (LOND.)

Sanitary Inspector:

CHAS. E. WOOD, Cert. San. Inst.

HEALTH DEPARTMENT,

SALTERGATE,

JAN. 31ST, 1897.

Gentlemen,

I beg to present a Report on the Health of the Borough during 1896. This twelvemonth includes a short period during which my predecessor held office, a considerable interregnum, and the six months during which I have had the honour of acting as your Medical Officer of Health.

I would ask your special attention during the current year to the following questions :

- (1) Provision of an Isolation Hospital.*
- (2) The Water Supply,*
- (3) The question of Refuse Disposal, with special reference to Water Carriage.*

My thanks are due to the Chairman and individual Members of the Health Committee for the cordial assistance they have at all times rendered me. I take this opportunity of recording my appreciation of the excellent sanitary work your Sanitary Inspector, Mr. Wood, has done and is doing. His intimate knowledge of local conditions has been invaluable.

I am,

Your obedient servant,

MEREDITH RICHARDS.

1896.

Summary of Report.

BOROUGH OF CHESTERFIELD.

Area : 1219 acres. Situation, on coal measure clay, average of 300 feet above O.D.

Population (census) 1891, 22,009 ; estimated 1896, 23,244.

Number of Houses : 1891, 4171 ; 1896, 4649.

Rateable Value 1896, £80,868 ; Assessable Value, £75,034.

General District Rate : 4s. in the £ for Old Borough ; 3s. for Brampton ; 2s. 6d. for Newbold ; 1s. 6d. for Hasland.

Poor Rate (including School Board), 3s. 4d.

Vital Statistics, 1896.

Birth Rate per 1,000, 36.1.

Crude Death Rate per 1,000, 21.73.

Corrected Death Rate per 1,000, 20.6.

Infantile Mortality (Deaths under 1 year per 1,000 Births), 167.

Death Rate, per 1,000, from the seven principal Zymotic Diseases,
3.6

Isolation Hospital : A temporary hospital reserved for Small-Pox.
Water Supply :—

Source of Public Supply : The Linacre Reservoirs.

Any change in 1896 ? Works purchased by the Gas and Water Board.

Scavenging and Refuse Disposal : By Contractors at the Expense of this Authority.

Nuisances abated during 1896 : 978.

R E P O R T.

Population.—The population at the 1891 census was 22,009. Assuming that the rate of increase has remained the same as between 1881 and 1891, the estimated population at the middle of 1896 was **23,244**.

At the time of the census there were 4,171 inhabited houses. 569 have since been built, while 91 have been closed or demolished. The number of inhabited houses at the end of 1896 was therefore 4,649.

From a consideration of this and other facts, it seems probable that the actual population is somewhat larger than than estimated by the Registrar-General's formula.

The area of the borough is 1,219 acres, with a density of 19·1 per acre. It should be remembered however, that the "old borough" is much more thickly populated, having a density of about 42 persons per acre.

Births.—The number of births registered in the Borough was ~~862~~ ⁸³⁷ (37·1 per 1,000 of the estimated population). Of this number, 450 were boys and 412 were girls. 69, or 8·2 per cent., were illegitimate.

Twenty-three of these births, including 17 of the illegitimate births occurring at the Workhouse, should be assigned to the Chesterfield Rural District.

The true birth rate is therefore 36·1 per 1,000 population, as compared with 29·7 for the whole of England and Wales, and the illegitimate rate, 6·4 per 100 births, as compared with 4·3 per cent. for the whole of England and Wales during 1895.

Deaths.—505 deaths were registered during the year. This is equal to a crude death rate of 21·73 per 1,000. There were however, 28 deaths at the Workhouse, 14 deaths at the Chesterfield and North Derbyshire Hospital, and 2 deaths by violence, of non-residents. Excluding these, but adding 4 deaths of Chesterfield residents at the County Asylum, we have a nett total deaths of 465, which is equivalent to a death rate of 20 per 1,000.

We have further to note the fact that the population of Chesterfield contains an undue proportion of young adults as compared with the Country generally. Making due allowance for this, we get a **corrected death rate of 20·6 per 1,000**, as compared with 17·1 for England and Wales.

The Infantile death rate (deaths under 1 year of age) was equivalent to 167 per 1,000 births

Inquests were held in 26 cases or 5·1 per cent of all deaths. The number of deaths uncertified by medical men or coroner amounted to another 26. This is an unsatisfactory number.

The unwelcome rise in the death rate is, no doubt, partly due to the population being under-estimated. The Measles epidemic also was responsible for a mortality of 1·5 per 1000, as compared with ·5 last year. Respiratory diseases were accountable for no less than 100 deaths, 38 being due to Pneumonia.

It is to be regretted that with so much disease requiring hospital treatment there is no institution, except the Workhouse, which receives medical cases.

I have omitted the usual table showing the mortality in the three wards. The estimated population of the wards appears to me to be so inaccurate that any deductions made from local death rates would be fallacious.

Table II gives the registered cause of deaths for the whole Borough.

Zymotic Disease.—Tables III and IV give the number of cases of the notifiable infectious disease occurring in the Borough during 1896 and the previous three years.

The so-called Zymotic death rate (*i.e.*, the death rate from Small-Pox, Scarlet Fever, Measles, Whooping Cough, Diarrhœa and Diphtheria) was equivalent to 3.6 per 1,000, a high figure, nearly half of which was due to the Measles Epidemic during the summer.

Isolation Hospital.—The only provision at present made by the Sanitary Authority is the temporary structure at Hady Lane. This has accommodated 32 Small-Pox patients in former years and is reserved for that disease. A site of 12 acres has, however, been purchased at Hasland at a cost of £1,200, and possession was entered into on October 1st, 1896. We may therefore assume that the question of erecting a permanent Isolation Hospital has come within the region of practical politics. It is well known that the Derbyshire County Council have, under the Isolation Hospitals Act, made an order constituting a large hospital district for the North-East of the County. The Borough, for various reasons, exercised its right to refuse to enter into this combination. I would point out the desirability of approaching to the North-East Derbyshire Hospital Committee with the object of devising some scheme which should be to the advantage of both parties. From several years personal experience of the management of fever hospitals, I can speak with some assurance as to the disproportionate cost of erecting and maintaining a small hospital as compared with the annual cost of one twice the size. A great part of the initial outlay, such as for officers' quarters, laundry, mortuary, ambulance, ambulance shed, porter's lodge, boundary walls and roads would be practically the same in a small hospital (say of 24 beds) such as we should require as in one twice or three times as large: while the cost of porter's wages, matron's salary and many other expenses, would be identical in the two cases.

It would perhaps be possible to come to some arrangement by which the Borough might build a hospital and undertake, for a term of years, to receive patients from the surrounding district (say a six mile radius) on terms to be agreed. This system of contract

is already in force between different Sanitary Authorities in various parts of the country, and I presume the Hospital Committee would, under section 14 of the Isolation Hospitals Act, possess similar powers. Such a plan would not only be economical to both parties, but would give the surrounding district the advantage of a central suitable site which has already been acquired on equitable terms.

Disinfection.—1066 Articles have been disinfected by the Washington Lyon Disinfecter. 88 houses have been fumigated with sulphur by the Health Department. This method of “disinfection,” however, cannot be regarded as satisfactory, and the Health Committee have decided to acquire a spraying apparatus in order to disinfect with perchloride of mercury or other liquid disinfectant. Hitherto, we have only disinfected houses infected with Small-Pox, Scarlet Fever, or Diphtheria. I think we should now add Phthisis to this list, at any rate in all cases where such measures are deemed desirable by the Medical Attendant.

It may be well to explain why application for disinfectants for private use are almost invariably refused. These are generally wanted either for offensive drains, or for use in the sickroom. When drains are offensive the proper remedy is to find and remove the cause of their foulness. In the case of infectious disease, chemical disinfectants are sometimes used with the idea of

- (1) Disinfecting the patient,
- (2) ,, air of the sickroom,
- (3) ,, walls,
- (4) ,, soiled linen,
- (5) ,, excreta
- (6) Placing small quantities about the house “to propitiate the germs.”

1, 2 and 3 are impracticable during the course of the illness ; 4 can be better effected by other means ; 5 is only important in the case of Typhoid (Enteric) Fever ; 6 is not of sufficient importance to be done at the expense of the town. It should also be remembered that an unskilled person could not be trusted with a large quantity of a powerful disinfectant, while the use of ineffectual chemicals in insufficient quantity is only productive of mischief from giving rise to a false sense of security, and consequent neglect of essential precautions.

Bacteriology.—Some months ago you decided to provide a small laboratory which should be available for making cultivations from throats suspected of being diphtheritic.

Your Medical Officer is also prepared to examine specimens for tubercle bacilli, and hopes very shortly to undertake what is known as the serum test for Typhoid (Enteric) Fever.

Cultivations from 16 throats have been examined during the past six months, and the diphtheria bacillus demonstrated in 7 instances.

Two cases are specially instructive :

First case.—Edith L., aged 3, was notified by Dr. J. H. Booth, as suffering from laryngeal diphtheria, which rapidly ended fatally. There were no obvious sanitary defects. There were two other children in the house, both declared to be and to have been in their normal state of health. In spite of this assurance I examined their throats and detected a pin's head white plug on one tonsil of the elder child (Ethel), and some slight swelling of the glands. A cultivation made by Dr. Barwise demonstrated the presence of diphtheria bacilli. It was ascertained that Ethel L. was the member of a class at Vicar Lane School, the teacher of which had, some weeks previously, been suffering severely from Diphtheria.

Second case.—T. B., aged 2 years, was notified by Dr. Clarke as suffering from Diphtheria. This case also was rapidly fatal. Adopting my usual custom of examining the throats of the rest of the family, I found that an elder child, attending St. Helen's St. School, had also a small speck of cheesy material in one of her tonsillar crypts. She had no symptoms when examined, and only on repeated questioning acknowledged that her throat had been a little sore some two or three weeks previously. Diphtheria bacilli were demonstrated in the case of the elder child as well as in the case of the one that died.

There can be little or no doubt that the first of these cases was indirectly infected from Vicar Lane School, and from enquiries made at the time, I believe the other was also traceable to school infection though **neither of the notified cases** was attending an infected school.

I have reported these instances not only as proof of the value of a bacteriological examination in the investigation of sporadic cases of Diphtheria, but as an interesting demonstration of the way in which school attendance may be responsible for the spread of infectious disease, even in cases where those notified are not at the school age.

Schools.—Seeing that no less than 5,000 children (1 in 5 of this population) attend the public elementary schools, it needs no

argument to show that school hygiene is an important factor in the health of a district. The School Managers have recently approved of the code of rules for infectious diseases produced in the Appendix. A copy of these regulations, printed on a large card, is hung up in each schoolroom. The Managers have also arranged for the prompt exclusion of any child suspected to be suffering from an infectious disease, including "sore throat," and for the head teacher immediately to advise when any child is so excluded, or when absence from school is suspected to be due to an infectious disease. As a compensation to the school authorities I provide the certificate required by the Education Department as to the exclusion of certain scholars. Special forms have also been provided for these various purposes and for releasing children from quarantine.

The co-operation of the School Managers in these matters has already proved of very considerable service to the Health Department.

Smallpox has been absent from the district for over two years. The present state of vaccination in this district makes one apprehensive as to what would happen were it again introduced. During 1896 only 56 per cent. of the children born were vaccinated or otherwise accounted for.

Scarlet Fever.—Cases have been more numerous than since 1893. Fortunately the type remains very mild, and only 3 per cent. of the cases have terminated fatally.

Diphtheria and Membranous Croup have also been slightly more prevalent than in previous years. It is to be hoped that we shall not share in the increase of diphtheria which has been so marked in the South Midlands.

Through the courtesy of Dr. Sims Woodhead I have been able to keep in stock a small quantity of Anti-toxin (the remedy for diphtheria) for the use of medical men in the Borough.

Typhoid Fever has not proved fatal in a single instance.

Diarrhœa has been somewhat less prevalent than in 1895, but including 16 cases of gastro-enteritis (really the same disease) resulted in no less than 34 deaths. 26 of these were in infants under 1 year. Many of these deaths would not have occurred (1). If the

mothers understood the preparation of infant food ; (2) If the milk supply was more effectually controlled ; (3) If proper storage room for food was provided ; (4) If middens and other filth nuisances were less common. The cold wet weather in August acted like a charm in checking the ravages of this disease.

Measles.—442 cases were reported to me by the School Managers. Probably there were something like three times as many cases in the borough. No less than 35 deaths are assigned to this cause.

Measles not being notifiable, and the arrangements with the School Managers not having been made until late in July, we were unable to get the epidemic properly in hand during the summer term. On the re-assembling of the schools, however, the system of voluntary notification (see above under “ Schools ”) appeared to be of service. A handbill suggesting certain precautions to be taken in the case of measles is distributed at every house thus notified. I believe we may do much to mitigate the virulence of measles by thus educating public opinion. There is no doubt that a large share of the present mortality is due to measles being regarded as a trivial ailment instead of one of the most fatal of the diseases of childhood.

Infantile Mortality.—Of every 1,000 children born in Chesterfield no less than 167 did not survive the first year. A large proportion of these deaths are really preventible, being for the most part due to ignorance of the proper method of feeding young infants.

As you are aware, an effort has been made to obtain the services of a skilled nurse, who should visit all houses where births have taken place and give practical instruction in the preparation of infant food. It is to be hoped that sufficient funds will shortly be forthcoming to carry this scheme into effect. The services of such an officer would be invaluable to the Health Department, if only as a missionary of hygiene.

Factory and Workshops Acts.—Table IX gives the number and nature of workshops entered on the Sanitary Authority's Register.

78 visits have been made to workshops. Three privies have

been converted into w.c.'s. One workshop has been ventilated. Secondary means of escape in cases of fire have been provided in two cases.

It is hoped that more time can be spared for this work during the coming year.

Water Supply.—With the exception of a small number of houses supplied by private wells, the Borough is still dependent on the water supplied from the Linacre Reservoirs by the Gas and Water Board, which has replaced the defunct Company. During the summer, the supply was often intermittent, though the scarcity was not as acutely felt as in 1895. It would appear that the available supply from the present gathering ground in dry years is under 900,000 gallons per day, while the population served is at least 48,000. Taking the low estimate of 20 gallons per head per day as the minimum quantity necessary, it would appear that even with the present population, there is a risk of scarcity during dry seasons. It is to be hoped that steps will be taken to remedy this.

Equally important is the question of quality. During the past six months, two specimens have been analysed by the County Analyst (Mr. John White). His results are as follows, expressed in parts per 100,000 :—

	August.		November.
Total Solids ...	15.5	...	21.5.
Free Ammonia ...	0.002	...	0.001.
Organic Ammonia	0.011	...	0.012.
Nitrogen as Nitrates			
and Nitrites ...	0.0	...	0.165.
Chlorine as Chlorides	1.75	...	1.75.
Hardness (total) ...	9.57	...	13.01.

On both occasions the Analyst reported very unfavourably on the quality of the water. When it is considered that most of the water is collected from cultivated land, and that there is a large amount of vegetable matter, such as dead leaves and stumps of trees, in the reservoir itself, the source of the organic matter is not far to seek.

Taking everything into consideration, I am of opinion that steps should be taken for the frequent and systematic inspection of every square yard of the gathering ground, so that every possible source of infection, such as drainage from houses, use of nightsoil for manure and so forth, should be rigidly excluded. Filtration on modern biological principles should also be resorted to.

When these precautions are taken, I believe that the quality of the water, as shown by analysis, would be found to be improved. Apart from that, it should be remembered that the question of the suitability of a water for a public supply is more a matter of its pedigree and natural history than of its chemical analysis. If efficient steps were taken, as suggested, to insure the present supply against specific infection, there is no reason to believe that its mere chemical composition would prove injurious.

Housing of the Working Classes.—Tables V. and VI. show that much has been done by the Sanitary Authority towards obtaining improved dwellings for the working classes. Most of this has been consequent on the house-to-house inspections which are systematically carried out as opportunity arises. Your Medical Officer has received so much gratuitous advice as to what should and what should not be done, to secure sanitary homes for the artisan class, that it may not be out of place to state very briefly some of the considerations involved.

First as regards old property. On the one hand it is suggested or rather demanded by certain amateur sanitarious, that we should forthwith condemn all cottage property which is not strictly in accordance with the most modern hygienic standards. While heartily sympathising with the desire to improve the conditions of our courts and alleys, it may be pointed out that such a course would entail the condemnation of a large portion of the old Borough, and that “shortest” ways are not always practicable. In the first place, there is not a sufficient number of new houses to accommodate those tenants who would be displaced, and in the second place many of the evicted tenants would be unable to afford the rents demanded for the newer houses. Many families would have to be content with the share of a house and general overcrowding would result.

My predecessor was fully alive to this last danger and very

wisely allowed much unsatisfactory property to be put into a state of repair in preference to resorting to more drastic measures. As long as this property remains moderately satisfactory it would be manifestly unfair to do otherwise than to allow it to die a natural death, individual houses being stringently dealt with as soon as they again lapse into such a state as to be actively dangerous to health.*

It is, however, satisfactory to note that there has been considerable activity in the building trade during the last couple of years, and we shall, in the future, have less reason to postpone the condemnation of insanitary property.

On the other hand it is urged that in endeavouring to close insanitary houses we are inflicting an injustice on the tenants by compelling them to seek more expensive houses. Cottages, we are further told, are what people like to make them, and their sanitary condition depends more on the use they are put to than on their structure and surroundings.

With regard to the first objection, it may be pointed out that improvements in the sanitary condition of artisans' cottages are only part of the general levelling up of the standard of comfort which has been such a marked feature of the present era. Such changes have not proved insuperable difficulties in the past, and there is no reason why they should do so in the future, provided sufficient time is allowed for the process of levelling up and for the economic adjustments thereby rendered necessary. With regard to the second objection, it is perfectly true that the sanitary condition of a given dwelling is largely dependent on the character of the tenants. Possibly a large share of effective hygienic work in the future will be educational. Nevertheless, it would appear incontestable that as Sanitarians we should insist that every dwelling should not only be well built and situated among healthy surroundings, but should be so designed as regards back-yards, sanitary conveniences and so forth, that it can be kept sweet and cleanly with the least possible expenditure of energy. When this

*With regard to the old property south of the Market Place, it will probably be best to treat this as an insanitary area, and deal with it under an improvement scheme which might with great advantage substitute a much needed Cattle Market and New Slaughter-houses for these unhealthy dwellings.

is done, we shall be in a position to demand from the tenants that good use is made of the opportunities afforded them.

With regard to New Houses.—Though the question of improving insanitary property is peculiarly important in an old Borough like Chesterfield, it must be remembered that Chesterfield is also a rapidly growing town and it is perhaps even more important that we should look a little ahead, and do all we can—if needs be by strengthening the Bye-Laws—to insure that all new property is built on model lines.

Unfortunately many of the newer cottages do not come up to this standard, but I should like to take this opportunity of congratulating the West Ward on the erection of the new cottages at Brampton for the Lancashire and East Coast Railway. These cottages are admirable both in construction and in design and may well serve as a model for future buildings of this same class. They provide a kitchen, scullery, parlour, a well lighted airy pantry and three bedrooms. Each cottage is provided with a W.C. and with a separate backyard. There is no ashpit but sanitary bins are provided for the dry refuse. The site is concreted and the drainage is in accordance with model Bye-Laws. I would strongly urge that in the future no cottages should be erected which do not conform to this type as far as the following essential points :

- (1) Provision of secondary means of access for removal of refuse.
- (2) „ W.C.
- (3) „ Sanitary ashbin instead of ashpit.
- (4) „ Suitable (lighted and ventilated) store room for food.
- (5) „ Concreted site.
- (6) „ Provision of a separate backyard.

The advantage of the first five items is sufficiently self evident. With regard to the last item it needs very little experience of the difficulty encountered in endeavouring to insist on the cleanliness and good order of common yards to justify a demand for this very essential provision. In the case of the backyards common to several houses what is everybody's business is done by nobody and even the efforts of a clean, orderly tenant, are often rendered of no avail by the neglect of his neighbours. All this would be remedied if

there were separate backyards with the consequent personal responsibility.

In contra-distinction to the above opinion, there is a belief that we should do better to make our Bye-Laws less stringent, so as to allow of the erection of cottages which would let at a lower rent than is now possible. Personally I am convinced that it will prove eminently unsatisfactory to assent to the erection of houses which are sanitarily unsound.

It may be perfectly true that private speculators can no longer build houses which they can let sufficiently cheap to accommodate the very poorest classes, viz., those just above the Common Lodging House habitués, but the remedy for this probably lies in other directions. For the present, this class will have to content themselves with the older houses which become vacant as their more affluent neighbours move into the new property.

Though the probable return from the cheapest class of cottage property may not be sufficient to tempt small private speculators, there is no reason why a company should not undertake the erection of model dwellings on a more extensive scale. Similar undertakings, though not yielding a large profit, have paid their way in other towns. A large company has not only the advantage of capital, but can build and administer its property on more economical terms and arrange for the constant supervision which this class of property requires, in order that it may be kept healthy and in a good state of repair.

Sewerage and Sewage Disposal.—A new pipe sewer has been laid in Victoria Street (northward), to replace the defective brick sewer.

The Sewage Disposal Works are still in the hands of the International Company.

Scavenging and Refuse Disposal.—In accordance with the request of the County Council Table XI has been prepared to show the estimated amount of work done in this Department and the cost per 1,000 of population.

I take this opportunity of urging upon the Council the importance of gradually abolishing the old privy middens and ashpits,

and of insisting that all new houses shall be provided with water closets and sanitary ashbins.

There are only two methods of refuse disposal which are sanitariously sound, viz., earth closets for isolated buildings with sufficient adjoining land, and water carriage for urban districts.

At the present moment there are no less than 2,585 privies in the borough besides 322 ashbins.

It can be shown that there must therefore be a superficial surface of over 140,000 square feet (nearly an acre) of foul and often putrefying organic matter existing in the immediate neighbourhood of dwellings. It is manifest that such a state of things is highly prejudicial to the health of the Borough. Suggestions are sometimes made that the appropriate remedy is simply to convert the old-fashioned middens into "model privies" and arrange for very frequent collection of refuse. As a matter of fact even these so-called "model privies" are sins against the laws of health, and it is more than questionable how far **very frequent** collection may not give rise to greater evils from fouling of yards and passages than does the nuisance it is sought to abate. At any rate your Medical Officer has no enthusiasm for such a policy, and would rather that "those that are filthy" should remain "filthy still," until public opinion insists on water carriage being made universal.

Food Inspection.—The public and private Slaughter-houses have been regularly visited. No meat has been seized during the year. The public Slaughter-houses are old fashioned and generally inadequate.

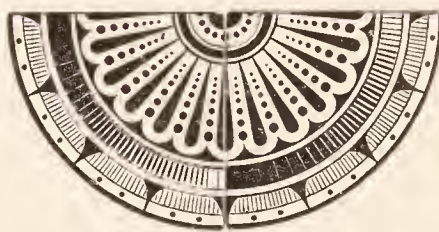
35 cases of fish were condemned during the year.

8 samples of milk were submitted to analysis, 1 was of poor quality, and one was adulterated.

Dairies and Cowsheds have recently been thoroughly inspected. One unsuitable cowshed was closed. It is proposed to forthwith serve notices on all occupiers whose premises are not satisfactory. It is lamentable that hardly a single cowkeeper recognises the necessity of supplying his cowsheds with pure water, light and fresh air.

Until there is some guarantee that milk is only obtained from

healthy cows, properly fed and cared for ; and that it is protected from contamination after leaving the cow, consumers should boil all milk before using it. This is specially important in the case of young children.



APPENDIX.

TABLE I.

Summary of Work done by the Inspector of Nuisances during the Year 1896.

Nature of Cases dealt with.	Ward.			Total.
	North.	South.	West.	
Total No. of Inspections of premises ...	499	516	598	1613
Inspection of dwelling-houses	316	182	452	950
Inspection and visits to premises where zymotic diseases have occurred ...	106	79	65	250
Inspection of premises where offensive trades are conducted	5	32	1	38
Inspection of workshops	28	35	15	78
„ „ slaughter-houses	10	78	15	103
„ „ cowsheds and dairies	20	13	29	62
„ „ bakehouses	11	19	12	42
„ „ common lodging-houses ...	3	78	9	90
Re inspection of work in progress for abatement of nuisances	189	223	271	683
Smoke Test applied to houses	49	1	1	51
No. of premises where zymotic diseases have occurred disinfected	36	32	20	88
No. of complaints from public investigated	18	24	15	57
No. of notices issued for abatement or abolition of nuisances	72	81	72	225
	49	70	60	179
No. of houses cleansed and limewashed	1	24	19	44
No. of cases of overcrowding abolished	0	4	6	10
Waste pipes disconnected from drains .	35	40	57	132
Drains cleansed and repaired	102	57	35	194
Defective traps and inlets	62	37	41	140
Insanitary privies and ashpits	32	46	93	174
Insanitary privies converted into water closets	8	1	2	11
Water closets cleansed, repaired, and ventilated	23	8	14	45
Structural defects	19	5	21	45
Yard surfaces repaired	34	5	58	97
Eaves and downspouts	22	26	45	93
Urinals provided and repaired	3	3	3	9
Animals improperly kept	1	4	4	9
Accumulation of filth	8	11	18	37
Total No. of nuisances	350	271	416	1040
„ „ „ abated	332	257	389	978

TABLE II. (A.)

Year.	England and Wales.	Derbyshire.	Urban Districts, Derbyshire.	Old Borough.	Entended Borough.
1887	18·7	17·9	.....	18·7	.....
1888	17·7	17·4	.....	19·2	.....
1889	17·8	17·5	.....	19·6	.....
1890	19·5	18·2	.. ...	24·02	.....
1891	20·2	18·2	19·7	24·6	.....
1892	19·01	19·1	19·5	24·5	.....
1893	19·2	17·5	18·9	20·0	21·4
1894	16·6	15·4	16·4	15·0	15·6
1895	18·7	17·1	17·8	.....	18·2
1896	17·1	.. ...	.....	.....	20·0

TABLE III.
Cases of Infectious Diseases Notified during 1896.

DISEASE.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Total 1896.	Total 1895.
Small-Pox ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Scarlet Fever	13	5	6	5	6	14	5	4	3	19	9	14	103	46
Diphtheria and Membranous Croup	...	...	...	2	1	5	4	1	...	1	...	...	14	8
Enteric Fever	2	1	...	2	1	..	...	1	1	...	...	1	9	28
Puerperal Fever	...	...	...	...	1	...	...	...	...	...	...	...	1	2
Erysipelas ...	2	3	...	...	1	3	...	4	1	1	3	...	18	12
Total, 1896	17	9	6	9	10	22	9	10	5	21	12	15	145	97
Total, 1895	3	4	1	4	1	0	16	13	19	8	9	19	...	...

TABLE IV.

	1896.		1895.		1894.		1893.		
	Cases.	Deaths	Cases.	Deaths	Cases.	Deaths	Cases.	Deaths	
Small-Pox ..	0	0	0	0	10	...	96	6	Notifiable Diseases. Comparable figures not obtainable before 1893.
Scarlet Fever ...	103	3	46	2	75	1	191	5	
Diphtheria and M'mbranous croup	14	5	8	4	9	4	10	2	
Erysipelas ...	18	0	12	0	24	2	33	1	
Puerperal Fever	1	1	2	1	0	0	5	2	
Typhoid (Enteric)	9	0	28	4	9	1	29	5	
*Diarrhœal Diseases ...	...	34	...	44	...	8	...	44
Measles ...	...	35	...	10	...	1	...	3
Whooping Cough	...	6	...	0	...	13	...	4	

* Including Gastro-Enteritis of Infants.

TABLE V.

Housing of the Working Classes Act.

Informal Notices to Repair ...	...	...	123
" " " complied with	...	89	
" " " in abeyance	...	34	
Legal Notices to Repair ...	...	...	37
" " " complied with by repair	...	19	
" " " " " closure	...	7	
" " " in abeyance ...	...	11	
Insanitary Houses Demolished by Lancashire, Derbyshire & East Coast Railway Co. ...	...	...	21
Insanitary Houses Closed during 1896 under legal notices of 1895 ...	...	...	3
Insanitary Houses Closed by informal notice in 1896	...	...	1
Total number of Houses dealt with ...			185

TABLE VI.

House to House Visitation.

STREETS IN NORTH WARD.

COURT OR STREET.	No. of Houses.	Single Houses.	No. of Persons.	Houses in bad repair.	Houses Unfit.	Other Nuisances	Houses with less than 5 rooms.				
							1	2	3	4	5 and over
Cowley Yard ...	8	8	43	...	8	...	...	1	7	...	...
Tapton Lane ...	3	3	17	3	...	...	...	...	3	...	...
Victoria Street ..	47	...	229	13	...	32	...	...	36	10	1
West Bars . . .	5	4	23	5	...	7	...	...	4	...	1
Dobbs' Yard, Saltergate ...	8	...	48	8	...	...	...	...	8	...	...
Dowdeswell Street	19	...	...	...	...	9	...	...	...	...	...
Sheffield Road ...	1	1	4	...	1	...	...	...	1	...	...
Total ...	91	16	364	29	9	48	...	1	59	10	2

STREETS IN WEST WARD.

COURT OR STREET.	No. of Houses.	Single Houses.	No. of Persons.	Houses in bad repair.	Houses Unfit.	Other Nuisances	Houses with less than 5 rooms.				
							1	2	3	4	5 and over
Chatsworth Road ...	97	3	322	19	...	39	...	1	23	33	...
Brickhouse Yard ...	24	11	107	24	...	13	...	3	20	1	...
Shepley Street ..	6	...	47	...	...	6	...	...	...	6	...
Gregory Yard ...	4	4	20	4	...	5	...	2	...	2	...
Factory Street ...	38	1	170	...	...	26	...	4	25	4	...
Wheatbridge Road ...	11	1	26	...	...	3	...	...	2	8	...
Tap Lane ...	7	1	34	2	...	4	...	...	1	5	...
Furnace Hill ...	22	2	96	22	...	24	...	...	17	4	...
Old Road ...	7	...	30	...	...	3	...	1	...	...	...
Brocklehurst Piece	14	...	...	1	...	4	...	...	...	4	...
Baslow Road . . .	3	1	7	2	...	7	...	1	...	1	...
Storrs' Road ...	3	...	15	...	...	3	...	...	...	3	...
Upper Moor Street	26	18	109	20	...	17	...	2	11	9	...
Totals ..	262	42	983	94	...	154	...	14	99	80	...

TABLE VII.

	North.	South.	West.	Total.
No. of houses	1713	1547	1410	4670
„ through houses ...	1554	1128	1156	3838
„ single do. ...	116	370	252	738
„ back-to-back do. ...	43	49	2	94
„ privies . . .	1054	842	689	2585
Houses having sole use of privy	800	441	510	1751
Privies used jointly ...	254	401	179	834
No. of middens	619	412	480	1511
„ dry ashpits	140	121	61	322
„ fresh water closets ...	414	176	32	622
Houses having sole use of w.c.	377	131	30	538
Houses having joint use of w.c.	37	45	2	84
Waste and slop water closets	39	55	46	140
Pail closets	2	7	57	...

TABLE VIII.

Articles Disinfected by the Steam Disinfector.

Mattresses	...	...	...	...	...	113
Beds	...	...	...	...	..	72
Bolsters or pillows	...	...	...	...	...	183
Bolsters or pillow-cases	...	...	...	...	...	128
Sheets	...	...	...	...	...	73
Blankets	...	...	...	...	...	166
Counterpanes	...	...	...	...	...	93
Curtains or bed-hangings	...	...	...	...	...	24
Carpets or mats	..	...	...	...	...	39
Articles of male clothing	...	...	...	..	...	38
Articles of female clothing	...	...	...	...	...	89
Miscellaneous	...	...	...	...	...	48
Total						1066

TABLE IX.

List of Workshops on the Register.

Bakers and Confectioners	...	...	...	...	11
Bootmakers	...	...	...	...	1
Blacksmiths	...	...	...	...	1
Cabinet Makers	...	...	...	...	3
Coach Builders and Wheelwrights	...	...	...	...	4
Cycle Repairers	...	...	...	...	3
Curtain Repairers	...	...	...	...	1
Costumiers	...	...	...	...	1
Dressmakers	...	...	...	...	31
Ginger Beer Manufacturers	...	...	...	...	1
Hosiery	„	...	...	...	3
Joiners and Builders	...	...	...	...	3
Milliners	...	...	...	...	8
Picture Framers	...	...	...	...	1
Rag Sorting	...	...	...	...	3
Rope Manufacturers	...	...	...	...	1
Sauce	„	...	...	...	1
Saddlery	...	...	...	...	3
Sugar Boilers	...	...	...	...	4
Tailors	...	...	...	...	13
Tin and Copper Smiths	...	...	...	...	1
Upholsterers	...	...	...	...	1
Tallow Chandlers	...	...	...	...	1
Total					100

TABLE X.

List of Inspected Trades.

					Number Registered.
Common Lodging Houses	..	...	...	...	15
Slaughterhouses	...	...	...	...	34
Cowsheds	...	..	...	...	35
Offensive Trades	...	...	...	...	9
Canal Boats	...	...	...	...	37
Various Workshops	...	...	...	...	100

TABLE XI.

Scavenging and Refuse Disposal.

If done by Sanitary Authority? Yes.

By contract or otherwise? By contract.

Amount and Nature of Refuse.

Number of w.c.'s	...	...	...	622	
„ slop water closets	...	...	...	140	
„ pail closets	...	...	...	66	emptied every week.
„ privies	...	...	...	2585	„ on request.
„ dry ashpits	...	...	...	322	„ „
„ sanitary ashbins	...	...	...	19§	„ every week.

Estimated quantity (per 1,000 population) of ashes

and night soil removed 375 tons.

Cost per 1,000 of population* £56 1 8

NOTE.—New contracts have been entered into for the next three years. Under these, the cost will be £43 15s. per 1,000 of population.* It has also been agreed that the middens and ashpits shall be emptied at least every two months, and oftener if required.

These figures include both collection and disposal of refuse. Much of the refuse is sent to farms, while the balance is tipped outside the borough. A destructor has not yet been provided.

* Taken for these purposes as 24,000. § Number will shortly be greatly increased.

TABLE XII.

METEOROLOGICAL RECORD.

Rain Gauge 5 inches in Diameter, 1 foot above ground, 279 feet above sea level. Temperature taken in the shade and 4 feet from the ground.

MONTHS.		Temperature of Air during the Month.				Mean Temperature of air.	Rainfall.	
		Highest.	Lowest.	Mean of			Number of dayson which rain fell.	Amount collected in inches.
				All highest.	All lowest.			
January	...	53	23	46	34.09	40.04	11	.97
February	...	56	19	45.9	31.86	56.1	8	.89
March ...	...	63	25	51.41	36.12	43.76	20	3.10
April ..	...	67	24	56.4	38.46	47.43	13	1.07
May ...	...	79	26	63.58	39.87	51.72	2	.32
June ...	...	85	38	73.26	48.7	44.3	15	2.25
July ...	...	87	37	73.12	50.38	45.62	10	.99
August	...	71	35	66.2	48.6	57.4	16	1.97
September	...	70	32	62.3	48.5	55.4	26	5.79
October	...	70	25	52.2	36.6	44.4	24	4.72
November	...	53	17	46	33.7	39.85	10	1.46
December	..	54	17	43.2	33.4	38.3	22	4.21
Entire year	...	87	17	53.63	40.02	47.02	157	27.74

TABLE XIII.

Report of the Inspector of Canal Boats.

As Inspector under the Canal Boats' Act, I present my Annual Report for the year ending 31st December, 1896.

I have regularly visited the portion of the Canal in the borough, but only on one occasion have I had the opportunity of inspecting a canal boat. The boat conformed with all the necessary requirements of the Act.

From the District Agent I learn that only two boats came to Chesterfield, and that both were compelled to unload outside the basin on to the canal bank. This is due to the entrance of the basin being gradually silted up to such an extent as to prevent boats from entering the basin.

As the owners of the canal do not make any attempt to remove this silt, there is no doubt that the benefit derived from the carriage by water has ceased to exist so far as Chesterfield is concerned.

During the year an attempt was made to trace the 37 boats which had been registered by this Authority ; of these

19 had been inspected by other Authorities,
1 broken up,
10 disposed of,
7 unable to trace.

CHAS. E. WOOD,
INSPECTOR.

CHESTERFIELD SCHOOL BOARD.

INFECTIOUS DISEASES.

Children suffering from any of the undermentioned Diseases, or living in a house where either is said to exist, must be excluded from attending School for the following period.

DISEASE.		PERIOD OF EXCLUSION	
		For Children Suffering	For Children not Suffering, but Living in Infected Houses.
SMALL-POX ... ..	... ..	Until a notice has been received from the School Board Office on Form 24 (a), that the Medical Officer of Health has declared it safe to re-admit.	
SCARLET FEVER (Scarlatina) ... ..	... ..	
TYPHOID FEVER (Enteric) ... ..	... ..	
DIPHTHERIA ... ..	... ..	
MEASLES ... ..	... ..	Three weeks after the appearance of the rash.	Three weeks after the onset of the last case.
WHOOPING COUGH ... ..	... ..	Six weeks from onset and not until ceased whooping.	Not until three weeks after the onset of the first case, and not then if there be any cough.
CHICKEN-POX ... ..	... ..	Not to be excluded.	
MUMPS ... ..	... ..	
GERMAN MEASLES ... ..	... ..	

Head Teachers and their assistants are particularly requested to note any symptoms of illness among their scholars. If they suspect the outset of any infectious disease they should at once send home the child in question, and notify the parents, and at the same time the Medical Officer of Health on Form No. 19 (b). They should remember that infectious disease may be of all grades of severity, and that in order to limit the spread of disease, it is as important to exclude mild cases as to exclude severe ones.

The following suggestions do not of course embody an account of all the symptoms of infectious disease, but include those which are most readily noticed by a non-medical observer.

GENERAL SYMPTOMS ---Which would warrant temporary exclusion from school.

ANY RASH, especially a diffuse or blotchy redness.

HEADACHE coming on suddenly in a child not subject to this complaint.

An attack of VOMITING.

An attack of SHIVERING.

SORE THROAT. ---Especially if the throat looks red inside, or white patches can be seen at the sides *or* back of the throat, or if lumps can be felt at the angles of the jaw.

RISE OF TEMPERATURE ABOVE NORMAL. --- This may be ascertained by noting any undue heat of the child's skin, or better by use of a thermometer.

SPECIAL SYMPTOMS.

SCARLET FEVER (SCARLATINA). ---The outset is usually sudden, frequently attended by vomiting There is more or less sore throat, followed within twenty-four hours by a red rash on the chest, which extends to the rest of the body. The rash may be only slightly marked, being little more apparent than a slight blush, or may be dark and blotchy. Later on the skin peels off the body in larger or smaller flakes. This peeling or desquamation is usually most noticeable on the hands, especially about the fingers, to which it gives a very ragged appearance. Any child who is found to be desquamating should be excluded from school, unless the Medical Officer of Health reports that there is no danger.

DIPHTHERIA AND SORE THROAT are often quite undistinguishable without special knowledge ; it is therefore wise to exclude all children who have any affection of the throat. Diphtheria often begins insidiously, and no complaint is made of pain in the throat, though the disease is none the less diphtheria.

MEASLES may begin with vomiting or convulsions in a young child. More commonly for the first few days the symptoms are those of a common cold, viz., sneezing, running at the eyes and nose, and some sore throat. About the fourth day a red, blotchy, slightly raised rash appears, being first visible on the face, behind the ears and on the wrists.

SMALL-POX usually begins with vomiting, headache and pains in the back. About the third day an eruption appears which consists first of pimples, which later on become vesicular, *i.e.*, they have fluid contents. These eventually pass into small sores which dry and scab. The number of pimples and therefore of scabs varies from one or two up to countless numbers.

CHICKEN-POX. ---The child rarely complains of anything beyond slight indisposition, but within a few hours a number of white clear vesicles, or watery heads appear on various parts of the body. At first they look like little drops of water, but soon dry and scab.

WHOOPING COUGH begins like an ordinary cough. When the disease is fully developed, the child has attacks in which a series of coughs follow one another without any interval until the child is out of breath, when it takes a deep inspiration. The curious sound accompanying this inspiration is the characteristic "whoop." A fit of coughing is often followed by vomiting, and any child in whom this is observed would rightly be suspected of having whooping cough.

MUMPS. ---The child is out of sorts, complains of pain about the jaw, and develops a swelling on each side of the face.

RINGWORM. ---Any bald patch, or any round scaly patch, occurring on a child's scalp is almost certain to be a ringworm.

Whenever any child is sent home, as above mentioned, the Head Teacher shall forthwith notify the Medical Officer of Health on Form No. 19 (b) ; and when a child, who is absent from school, is reported by the parents to be suffering from any of the before mentioned Diseases, the Attendance Officer shall at once inform the Medical Officer of Health of the particulars of the case. Form No. 19 (c).

The Principal Teacher shall be personally responsible for strict adherence to the Rule requiring the exclusion of certain children.

July 24th, 1896.

Approved,

MEREDITH RICHARDS, M.D.,

Medical Officer of Health for the Borough of Chesterfield.

By Order of the Managers.

C. J. KERSLAKE,

Secretary.

